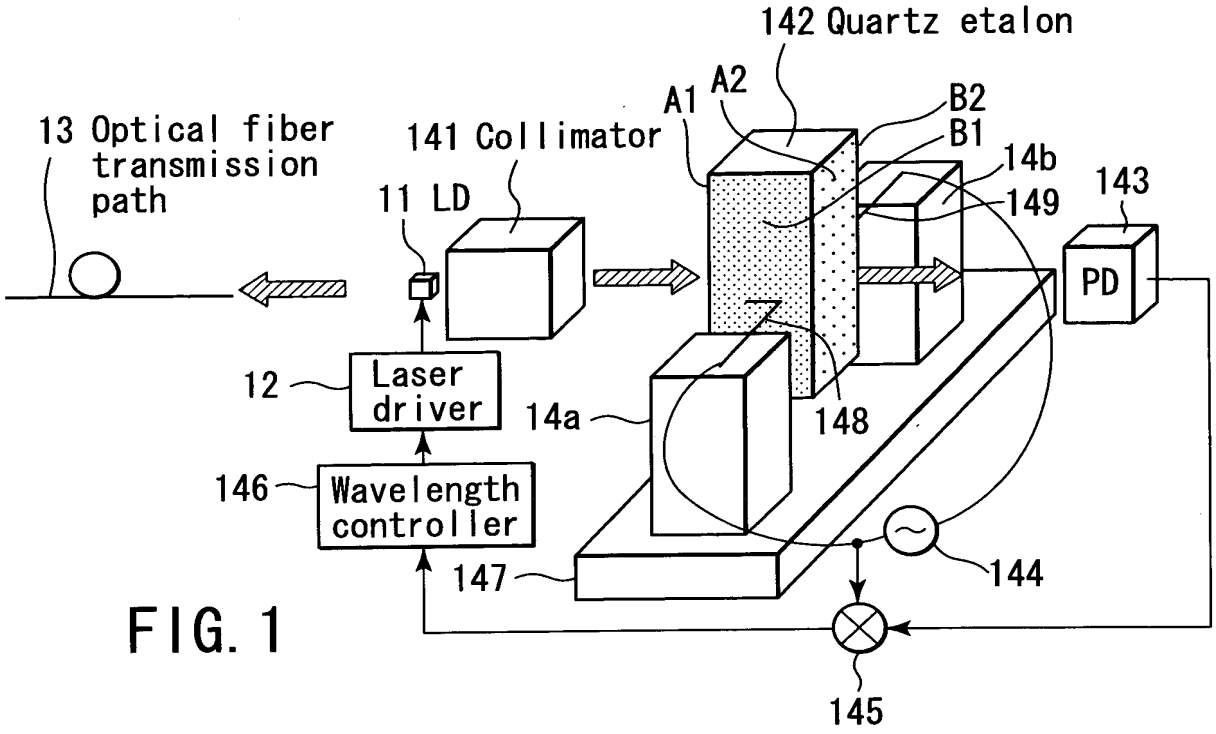
142 Quartz etalon
A1
A2
B2
B1
13 Optical fiber transmission path
141 Collimator
11 LD
14b
149
143
PD
12
Laser driver
14a
148
146
Wavelength controller
147
144
145

FIG. 1

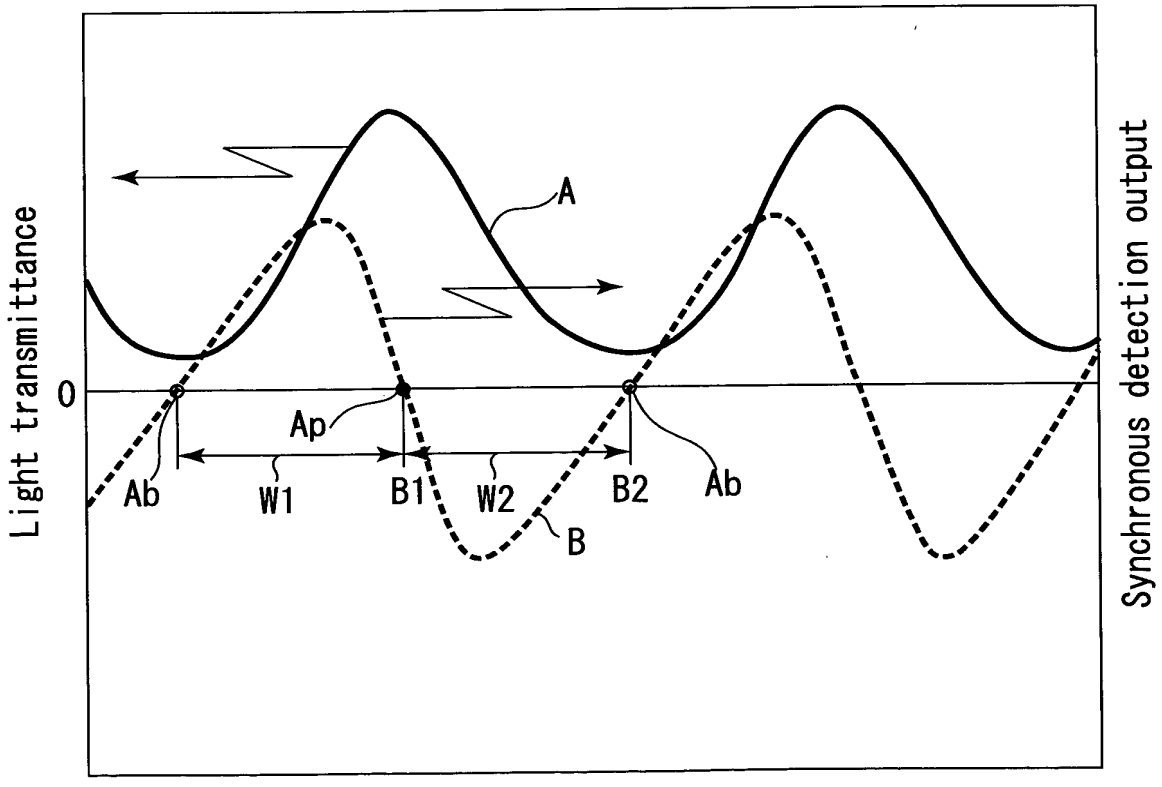
A
0
Ap
Ab
W1
B1
W2
B2
Ab
B
Light transmittance
Synchronous detection output
Wavelength

FIG. 2

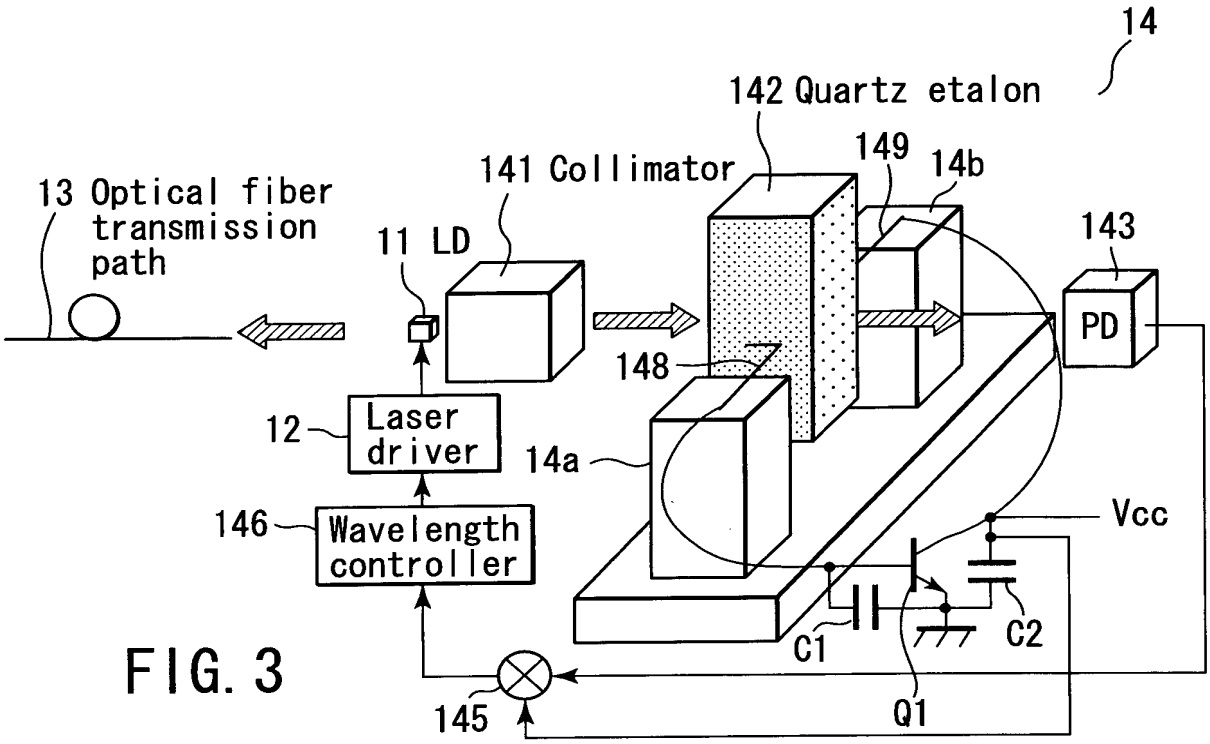
14
142 Quartz etalon
149
14b
141 Collimator
13 Optical fiber transmission path
11 LD
143
PD
148
12
Laser driver
14a
146
Wavelength controller
Vcc
C1
C2
Q1
145

FIG. 3

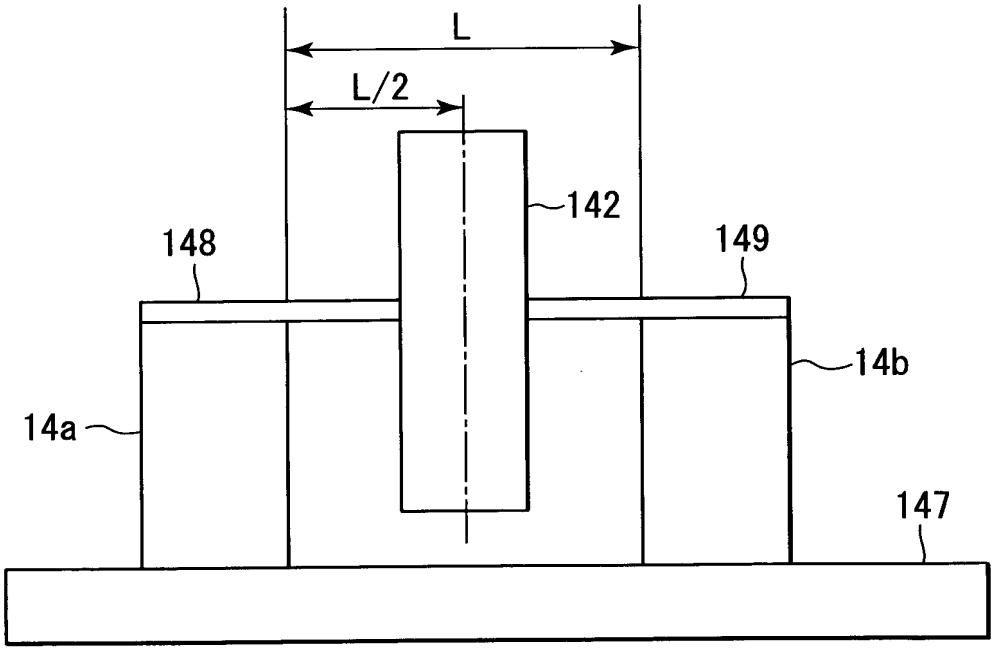
L
L/2
142
148
149
14b
14a
147

FIG. 4

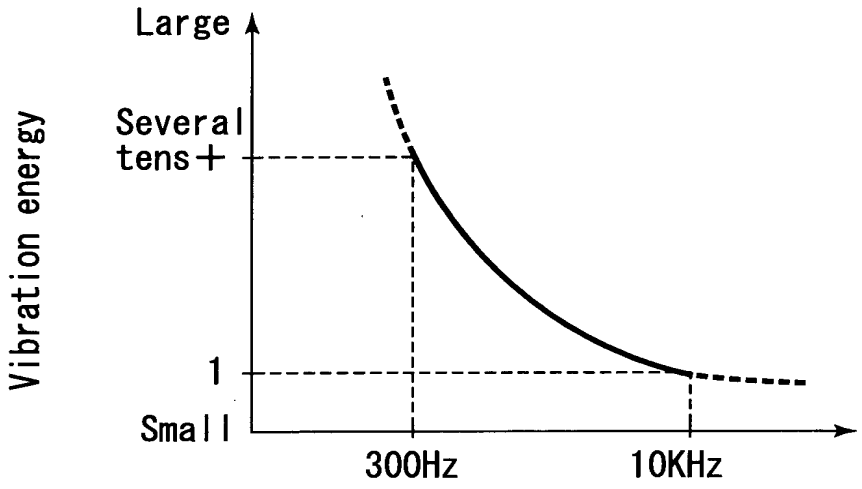
Large
Several tens +
1
Small
Vibration energy
300Hz
10KHz

FIG. 5

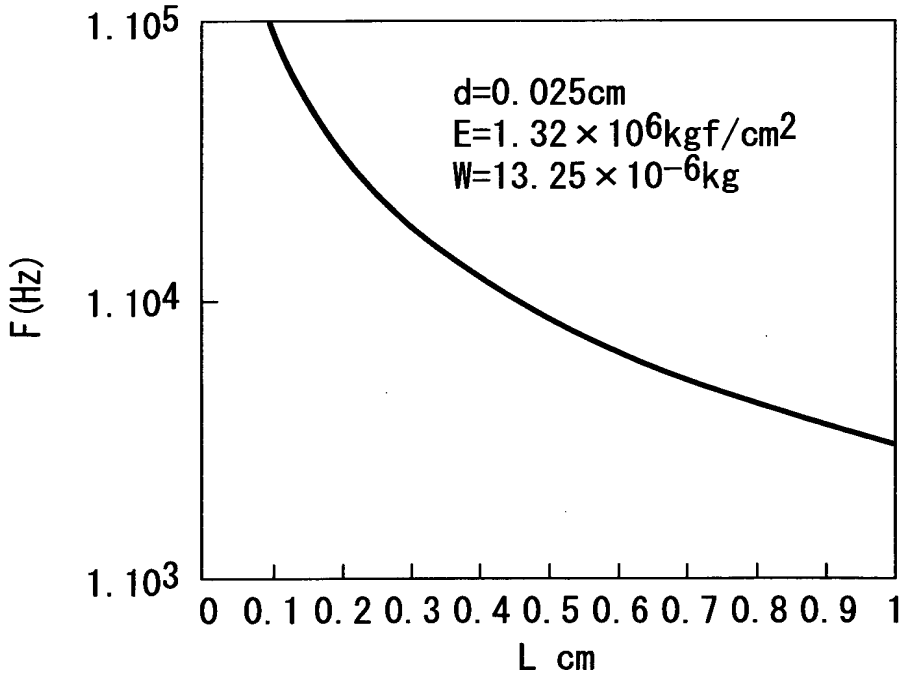
1.10^5
1.10^4
1.10^3
F(Hz)
d=0.025cm
E=1.32×10^6kgf/cm^2
W=13.25×10^-6kg
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
L cm

FIG. 6

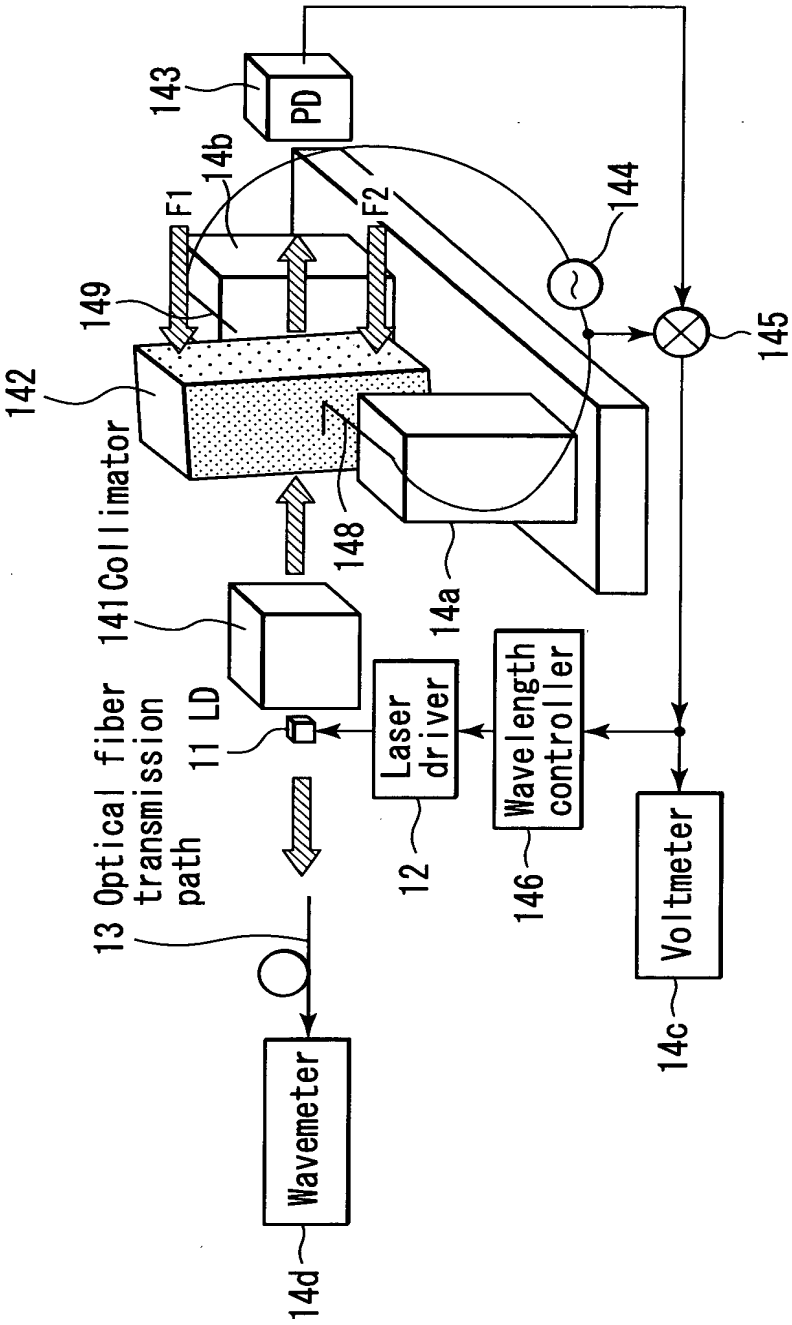
143
PD
14b
F1
F2
144
149
145
142
141 Collimator
148
14a
11 LD
Laser driver
Wavelength controller
Voltmeter
13 Optical fiber transmission path
12
146
14c
Wavemeter
14d

FIG. 7